CONCLUSIONS The serial measurement of platelet aggregation level is of importance in long term use of DAPT; extended DAPT beyond one year should be personalized in patients implanted with a DES.

GW26-e1597

Intravascular ultrasound-guided wiring technique for stumpless chronic total occlusion

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OBJECTIVES To evaluate safety and efficacy of IVUS -guided wiring technique for stumpless chronic total occlusion (CTO) lesions.

METHODS 40 Patients with blunt and vague stump (stumpless) CTO lesions while could not determine the wire progress orientation, were selected in this study. The IVUS catheter was introduced into the side branch and it was withdrawn from the side branch to find the entry point of the occlusion, then guiding the progress of guiding wire. Procedural success rate, operation time, contrastor dosage and complications (such as emergent operation, fatal myocardial infarction and death) were evaluated during hospitalization and 6 months follow-up.

RESULTS A total of 42 CTO lesions were enrolled between March 2013 and October 2014. The left anterior descending artery was the most common target-lesion location [27 lesions (64%)]. CTO lesions were successfully reopened in 31 lesions (74%). The entry point could not be identified in two; Guiding wire progress in the false lumen of subintimal in 10 and full guide-wire passage was impossible in 9; TIMI 3 flow could not be achieved even after stenting in 2. Guiding wire manipulation- related vessel injury was detected by IVUS in 16 lesions (coronary hematoma in 8, coronary peroration in 2). There was not serious complication such as fatal myocardial infarction, emergent operation and death during or after the procedures.

CONCLUSIONS The IVUS-guided wiring penetration technique is useful and safe for the recanalization of stumpless CTO lesions.

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Short-term clinical outcomes for bifurcation treatment using a provisional T-stenting and double proximal optimization technique with Absorb bioresorbable scaffolds.

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OBJECTIVES Bioresorbable scaffolds (BVS) are being increasingly used for bifurcation lesions. The aim of this study to evaluate the feasibility and short-term safety of the Absorb BVS in a bifurcation lesions using a provisional T-stenting with double proximal optimization technique (POT).

METHODS A total of 22 bifurcation lesions with in 22 patients (58±6 age, 14 males) were treated in our center with at least one BVS between September 2014 and February 2015. There were 7 (31.8%) cases with true bifurcation (Medina 1.1.1 and 1.0.1), 9 (40.9%) cases with a classification of (0.1.0) and 6 (27.3%) cases with a classification of (1.1.0). Most of bifurcation lesions were treated in the anterior descending artery (15 cases), 5 - in the circumflex, and in 2 cases - in the right coronary artery. Main branch pre-dilatation were performed in 22 (100%) cases. A provision 1 scaffold strategy was employed in 21 patients. And in 1 patient using T-stenting technique. POT with small length balloon (8.0-10.0 mm) was performed in each procedure twice. After BVS implantation in main branch, and as final technique after side branch dilatation. Kissing balloons were not used. Balloon catheters not more then 2.0 mm diameter were used for side branch dilatation. In order to prevent damage of the BVS struts wile removing «jailed wire» only coronary wires with hydrophilic coating were used.

RESULTS Lesion success occurred in all cases with no significant residual stenosis at the bifurcation. TIMI 3 flow was noted after procedure in both the main and side branch in all cases. There were no cases of periprocedural myocardial infarction. At 30 days follow-up there was no any major cardiac adverse events.

CONCLUSIONS Bifurcation lesions can be safety treated with BVS with good short-term outcomes when a provision T-stenting technique with double POT is planed.

GW26-e3838

The long-term effect of immediate and delayed PCI for ST-segment elevation acute myocardial infarction on cardiac function and myocardial infarct size

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OBJECTIVES To evaluate the long-term effect of immediate and delayed PCI for patients with ST-segment elevation acute myocardial infarction (STEMI) on cardiac function and myocardial infarct size.

METHODS A total of 563 patients with STEMI were treated in our hospital form December 2003 to December 2010. Among them 157 patients were treated by immediate PCI (immediate PCI group) who received PCI in 12 hours from onset of the chest pain, 124 patients were treated by delayed PCI (delayed PCI group) who received PCI from 13 hours to three weeks after onset of the chest pain, 131 patients were treated by the intravenous thrombolytic therapy (intravenous thrombolytic group) who did not receive PCI, and 151 patients were only treated by medical therapy (medical therapy group). All patients were followed lasting for 45±27 months (24-88 months). The major adverse cardiac events (MACE) defined as cardiac death, nonfatal recurrent myocardial infarction, heart failure and recurrent unstable angina, were recorded during follow-up. The cardiac structure and function were detected by echocardiography. The myocardial infarct size was estimated by the QRS point system in the last time of follow-up.

RESULTS Average period of the hospital stay (9.2±3.9 days) in delayed PCI group was significantly shorter than those (18.7±5.1days) in thrombolytic group and (19.6±4.9 days) medical therapy group ($P<0.05$), but was similar to those (8.8±5.7 days) in immediate PCI group. The rate of the cumulative MACE (30.7%) in delayed PCI and (22.9%) in immediate PCI were significantly less than those (39.8%) in thrombolytic group and (42.0%) in medical therapy group ($P<0.05$). Compared with thrombolytic and medical therapy group, the incidence of heart failure in delayed PCI and in immediate PCI group was less ($P<0.05$) during follow-up period. The LVEF(62.7±6.8%) in immediate PCI and (55.8±6.3%) in delayed PCI group was significantly higher than that (50.4±6.8%) in thrombolytic group and (46.6±7.0%) in medical therapy group ($P<0.05$) during the last time of follow-up. The LVDd (47.6±4.5 mm) in immediate PCI and (49.9±5.1 mm) in delayed PCI group was significantly less than that (54.5±6.3 mm) in thrombolytic and (58.4±4.9 mm) in medical therapy group. Decrease of QRS score-estimated MI size by initial and follow-up electrocardiograms in immediate PCI and in delayed PCI was greater than that in medical group and similar to that in thrombolytic group.

CONCLUSIONS The immediate PCI and delayed PCI for patients with STEMI may shorten in-hospital stay, decrease the rate of MACE during follow-up, decrease infarct size and improve left ventricular function.

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Effect of high sensitivity troponin T of patients in pressure wire dealing with critical lesion during coronary artery intervention

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OBJECTIVES To investigate effect of high sensitivity troponin T(hs-cTnT) and pressure wire in the coronary artery interventional therapy in treating critical lesion.

METHODS We recruited 86 patients with clinical diagnosis of coronary heart disease who had at least one segmental stenosis degree between 40%~70% in one major coronary artery on coronary angiography. All of the patients received preoperative hs-cTnT and FFR. They were divided into PCI group and control group. PCI group: Patients with FFR<0.75 were treated with PCI, and they were further divided into hs-cTnT rise group (≥0.034 ng / mL) and hs-cTnT normal group (<0.034 ng / mL). The control group: Patients with FFR≥0.75 received conservative drug therapy. The number of lesions and stent implantation of patients in PCI group were observed. The incidence rates of typical angina, nonfatal myocardial infarction, cardiac death and target vessel revascularization and other major adverse cardiac events (MACE) during hospitalization and follow'up among three groups were compared.